





Created: 5 minutes, 34 seconds after earthquake

# **PAGER**

Version 1

# **M 4.0, 1km NNE of The Geysers, CA**Origin Time: 2020-08-12 11:45:43 UTC (Wed 04:45:43 local) Location: 38.7848° N 122.7503° W Depth: 4.1 km

**Estimated Fatalities** 69% 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.

Green alert for shaking-related fatalities Estimated Economic Losses 10,000 1,000 100,000

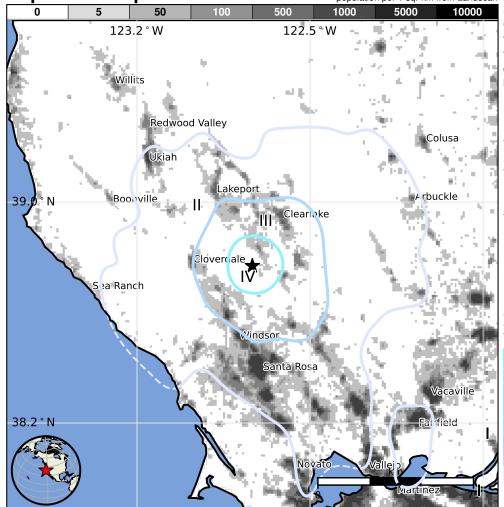
# **Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k=x1000)		1,522k*	1,026k	4k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

## Population Exposure

population per 1 sq. km from Landscan



#### PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. https://earthquake.usgs.gov/earthquakes/eventpage/nc73443355#pager

#### **Structures**

Overall, the population in this region resides in structures that are highly resistant to earthquake shaking, though some vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1993-09-21	396	6.0	VI(47k)	1
2003-12-22	382	6.6	VI(8k)	2
1989-10-18	205	6.9	VIII(109k)	62

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

# **Selected City Exposure**

from GeoNames.org

MMI	City	Population
IV	Cobb	2k
IV	Middletown	1k
Ш	Hidden Valley Lake	6k
Ш	Lower Lake	1k
Ш	Kelseyville	3k
Ш	Calistoga	5k
II	Santa Rosa	168k
II	Fairfield	105k
I	Vallejo	116k
I	Concord	122k
1	Antioch	102k

bold cities appear on map.

(k = x1000)

Event ID: nc73443355